Turner, B.L. 2012. *Montanoa serboana* (Asteraceae: Heliantheae), a new species from Oaxaca, Mexico. Phytoneuron 2012-64: 1–4. Published 2 Aug 2012. ISSN 2153 733X

MONTANOA SERBOANA (ASTERACEAE: HELIANTHEAE), A NEW SPECIES FROM OAXACA, MEXICO

BILLIE L. TURNER
Plant Resources Center
The University of Texas
Austin, TX 78712

ABSTRACT

A novel taxon, **Montanoa serboana** B.L. Turner **sp. nov.**, is described from Distrito Pochutla in Oaxaca, Mexico. It is reportedly a tree to 8 meters high, possessing characters of sect. *Montanoa* but differing in numerous traits, including few-flowered, rayless heads and glabrous leaves with entire margins. A photograph of the type is provided, along with maps showing its distribution in comparison to other species of *Montanoa* growing in the state of Oaxaca.

KEY WORDS: Asteraceae, Heliantheae, *Montanoa*, Mexico, Oaxaca

Identification of Mexican Asteraceae received at herbarium TEX-LL has occasioned the present paper.

MONTANOA SERBOANA B.L. Turner, **sp. nov.** Figure. 1 **TYPE: MEXICO. Oaxaca.** Distrito Pochutla, Mpio. San Miguel del Puerto: En la vereda que va al cafetal Arroyo Arena, ca 150 degrees and 1.47 km from Rancho "Dioon," selva mediana subperennifolia con café, ca 600 m, "11/12/2003," *Arturo Nava Zafra 243* [with Sanchez, Salas, and Pascual] (holotype: TEX).

Similar to *Montanoa tomentosa* Cerv. but arborescent, heads eradiate, disk florets 3–5 per head (vs 6 or more), corollas minutely glandular-pubescent, and leaves glabrous with entire margins (vs variously pubescent and usually trilobed").

Tree up to "8 m" tall. **Stems** (uppermost) rounded, glabrous. **Leaves** glabrous; petioles 3–4 cm long; blades broadly lanceolate to somewhat elliptic, mostly 12–20 cm long, 4–6 cm wide, grading into the petioles, 3-nervate from ca 1 cm above the base, margins entire. **Capitulescence** a terminal or axillary cymose panicle, 10–12 cm long, 5–8 cm wide; primary peduncles 2–4 cm long, ultimate peduncles mostly 2–4 mm long, pubescent with spreading hairs 0.5–1.0 mm long. **Heads** 4–5 mm high; involucres 1–2 seriate, ca 2.5 mm long, 2–3 mm wide (at anthesis), composed of ca 5 subequal bracts; pales ovate, apiculate, ca 2.5 mm long, villous with white hairs 1–2 mm long. **Ray florets** absent. **Disk florets** 3–5 per head; corollas reportedly "white," ca 2 mm long; minutely glandular-pubescent, the hairs intermixed with sessile atomiferous glands; corolla tubes ca 1 mm long, throat abruptly campanulate, ca 1.5 mm long, lobes ca 0.7 mm long. **Anthers** yellow, appendages ca 0.5 mm long. **Achenes** (immature) epappose, glabrous. Known only from the type collection.

The name of the species is an acronym derived from Sociedad para el Estudio de los Recursos Biotecos de Oaxaca (SERBO), which supported the collection of the type of *Montanoa serboana*.

This is a remarkable and unexpected novelty in *Montanoa*, considering the relatively recent systematic treatment of the genus by Funk (1982). By characters of the pales and florets, it appears

UNIVERSITY OF TEXAS HERBARIUM
TEX
copyright reserved
0 1 2 3 4 5 6 7 8 9 10 cm
The University of Texas Herbarium (TEX)
Montanoa serboana B.L. Turner, sp. nov. [tentative]
Det. B.L. Turner 2012
SERBO, A.C.
México, Oaxaca, Distrito: Pochutla, Municipio: San Miguel del Puerto.
En la vereda que va al cafetal "Arroyo Arena". A 150° y 1.47 km. del R. "Dioon".
Selva mediana subperennifolia. con café.
15°58'48.6"N 96°5'54.6"W Altitud: 600 msnm Fecha: 11/12/2003
Árbol. de 8 m. con flores blancas.
Colectores: Arturo Nava Zafra 243, con Arturo Sánchez, Silvia Salas, José Pascual
Dupl.= 8
Conservación de las selvas con café de la cuenca del río San Lorenzo
Sociedad para el Estudio de los Recursos Bióticos de Oaxaca
HOLOTYPE OF: Montanoa serboana B.L. Turner

Figure 1. Holotype of *Montanoa serboana* B.L. Turner.

to belong to the sect. *Montanoa*, differing by having different foliage (blades broadly lanceolate, glabrous and entire) and few flowered, rayless heads. Within the section, *M. serboana* presumably relates to *M. tomentosa* Cerv. Few-flowered rayless heads were reported in reduced individuals of *M. tomentosa* by Funk (1982, p. 39), such plants having previously been described (based only upon their types), as species (*M. gentryi*, *M. hemsleyana*, and *M. rekoi*). The present novelty differs from all such variants of *M. tomentosa* in having different leaves and florets. Additionally, it is reportedly a tree up to 8 m tall, while most members of sect. *Montanoa* are described as "Much branched shrubs 1–3 m tall" (Funk 1982).

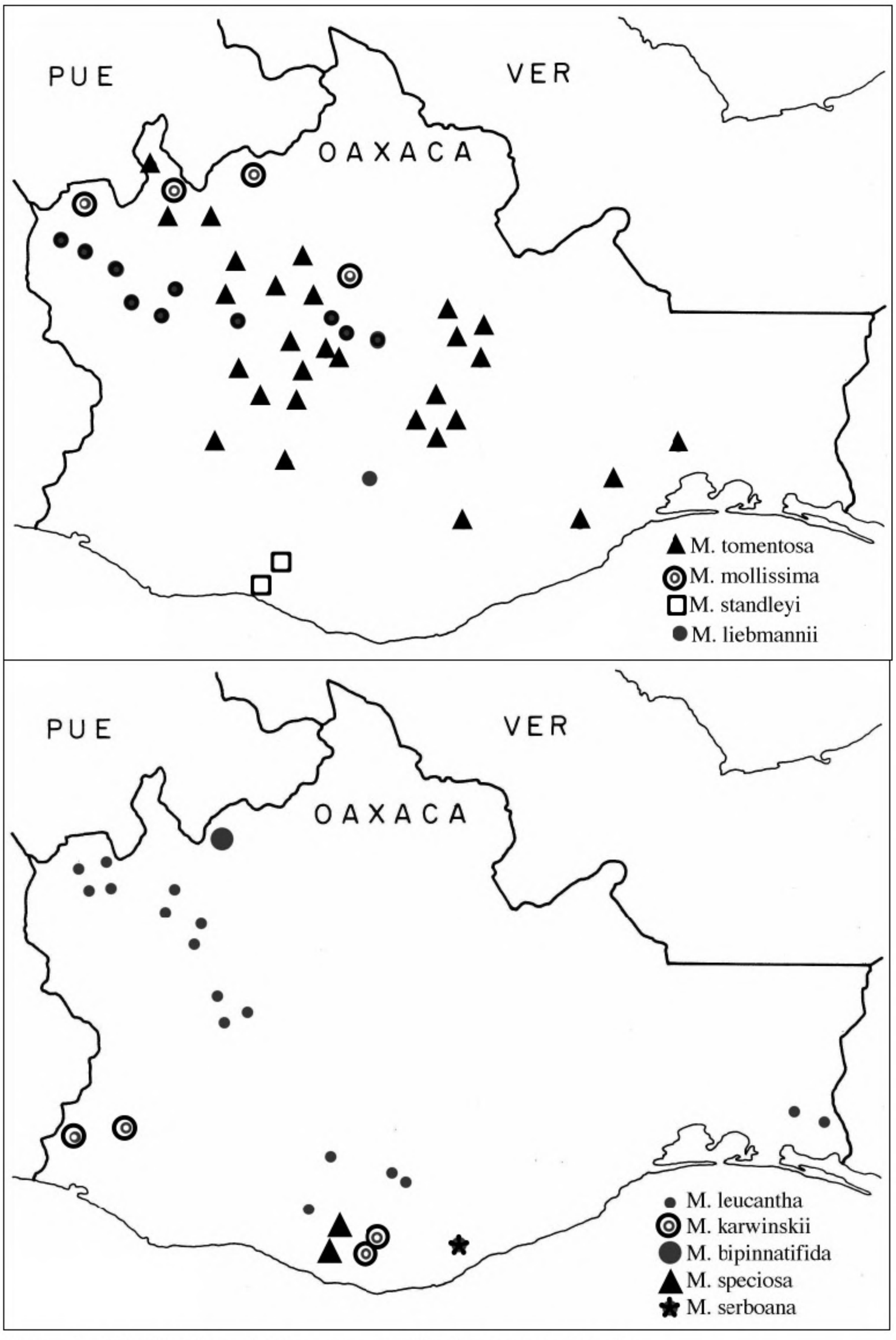

Figure 2. Distribution of *Montanoa* species in Oaxaca, Mexico.

With the description of *Montanoa serboana*, nine species of the genus are known to occur in the state of Oaxaca (Maps 1 and 2), one of these endemic (*M. serboana*) and two nearly so (*M. liebmannii* and *M. standleyi*), making the state a "Montanoan Paradise," no other state or area of Mexico possessing such a spectacular display of taxa.

ACKNOWLEDGEMENTS

I am grateful to my field companion Jana Kos for editorial assistance and to my colleague Jose Panero for his professional input. Distribution maps are based upon specimens on file at LL-TEX and those cited by Funk (1982).

LITERATURE CITED

Funk, V.A. 1982. The systematics of *Montanoa* (Asteraceae, Heliantheae). Mem. N.Y. Bot. Gard. 36: 1–133.